

County of San Diego SanBIOS GIS Data Standard

The California State Database compatible COSD GIS data standard used to record species observation for the entire County



Executive Summary of Purpose, Policy, and Data

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Document Version 3

H:\LUEG_GIS\COSD_SANBIOS_BPR\SanBIOS_v2.ppt



Background

The following departments are collecting biological species observation data:

- Parks
- DPW
- DEH
- FHA
- DPLU
- AWM



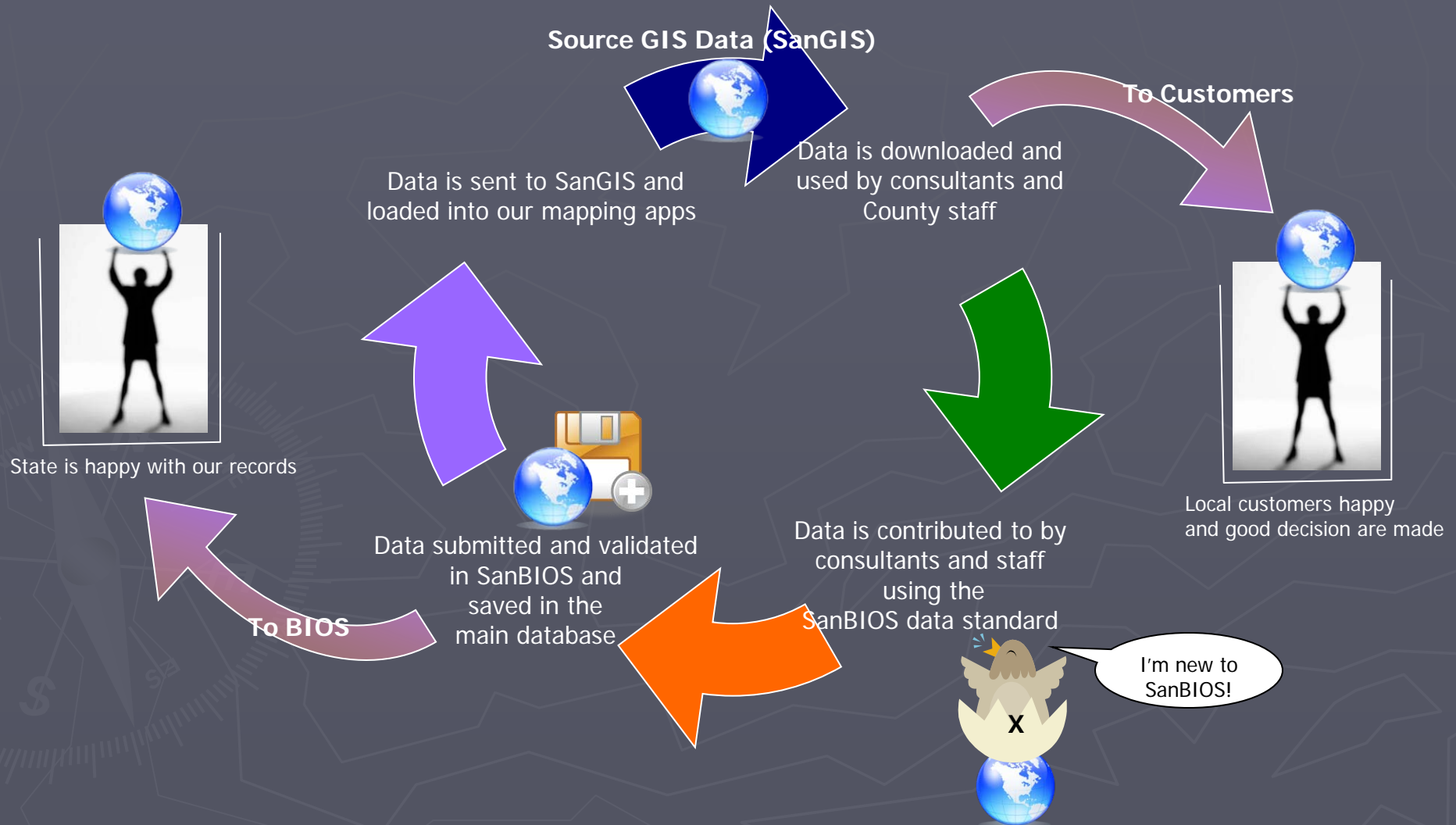
- ▶ MSCP, CEQA regulations, and identify and monitor invasive species

Why do we really need SanBIOS?

- ▶ Mandated
- ▶ Compatibility with State
- ▶ Information comes from external parties
- ▶ Consistency of information
- ▶ Better Stewardship

Record# 2
Species: X
Position Y: 32.123
Position X: -116.123
Life Form: bird
Date: 06-19-2002
Count: 1
Recorded by: Trish
Protocol: Gnatcatcher

General Workflow of SanBIOS



The Summary Recap

SanBIOS

- Satisfies mandates
 - ▶ CEQA
 - ▶ NEPA
 - ▶ MSCP
 - ▶ Permitting
- Directs the location of future permanent plot surveys and for uses in various monitoring projects
- Validates predictive species niche models
- Tracks historical trends and manage problem species
- Supports better decision-making
- Saves the Public time, money, potential litigation

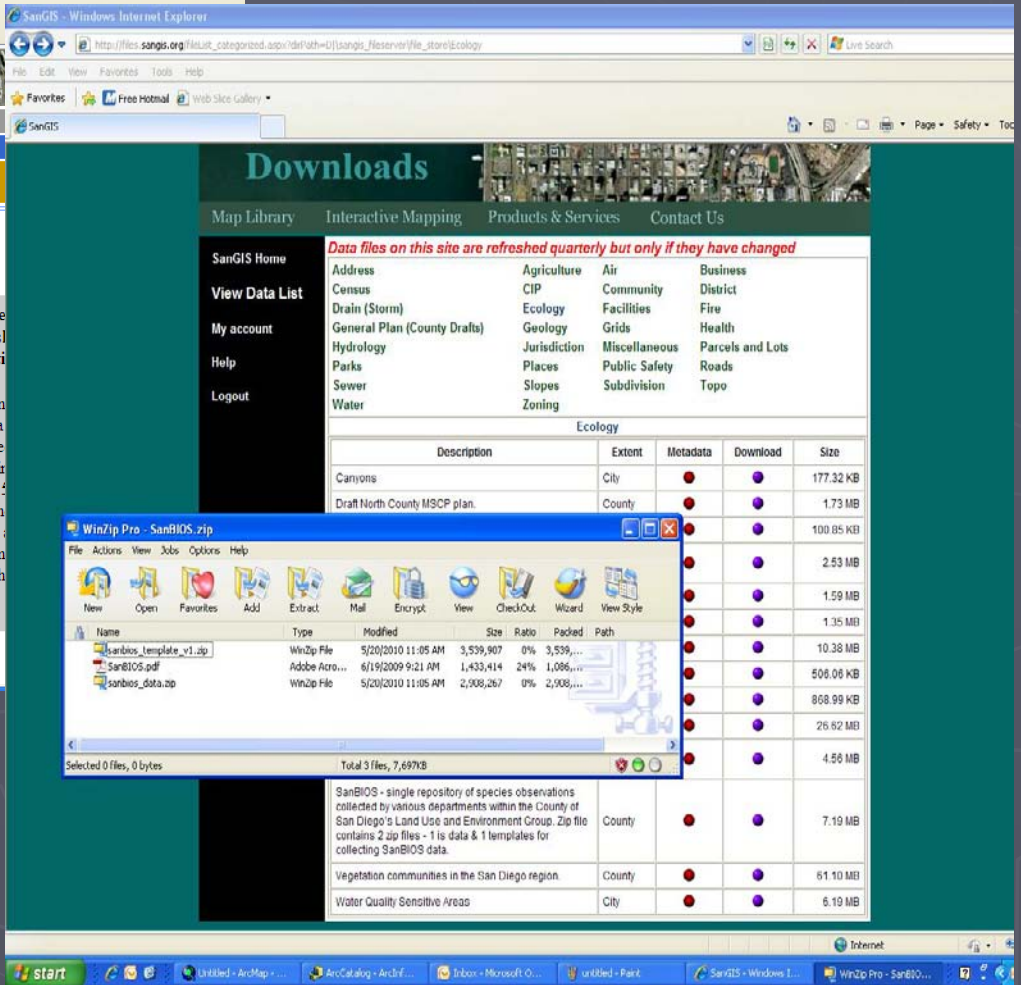
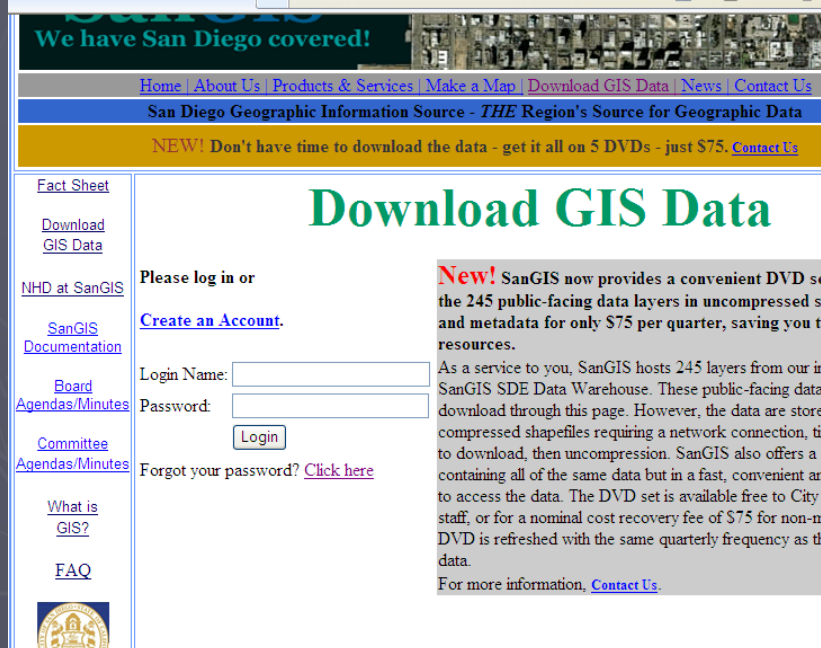
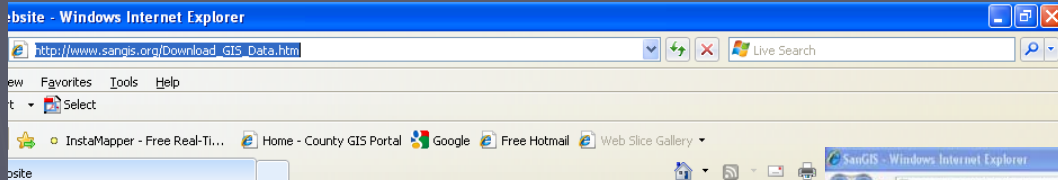


Photo courtesy of Chet McGaugh,
AMEC Earth and Environmental, Inc.

How do you use SanBIOS?

1. Go to www.SanGIS.org
2. Download SanBIOS package from the regional data warehouse
3. Use the full dataset for research
4. Populate your observations into the empty GIS template dataset
5. Return your observation dataset to DPLU

Where is the dataset located?



SanBIOS is in the Ecology Group

SanGIS - Windows Internet Explorer

http://files.sangis.org/fileList_categorized.aspx?dirPath=D:\sangis_fileserver\file_store\Ecology

File Edit View Favorites Tools Help

Favorites Free Hotmail Web Slice Gallery

SanGIS

Downloads

Map Library Interactive Mapping Products & Services Contact Us

SanGIS Home
View Data List
My account
Help
Logout

Data files on this site are refreshed quarterly but only if they have changed

Address	Agriculture	Air	Business
Census	CIP	Community	District
Drain (Storm)	Ecology	Facilities	Fire
General Plan (County Drafts)	Geology	Grids	Health
Hydrology	Jurisdiction	Miscellaneous	Parcels and Lots
Parks	Places	Public Safety	Roads
Sewer	Slopes	Subdivision	Topo
Water	Zoning		

Ecology

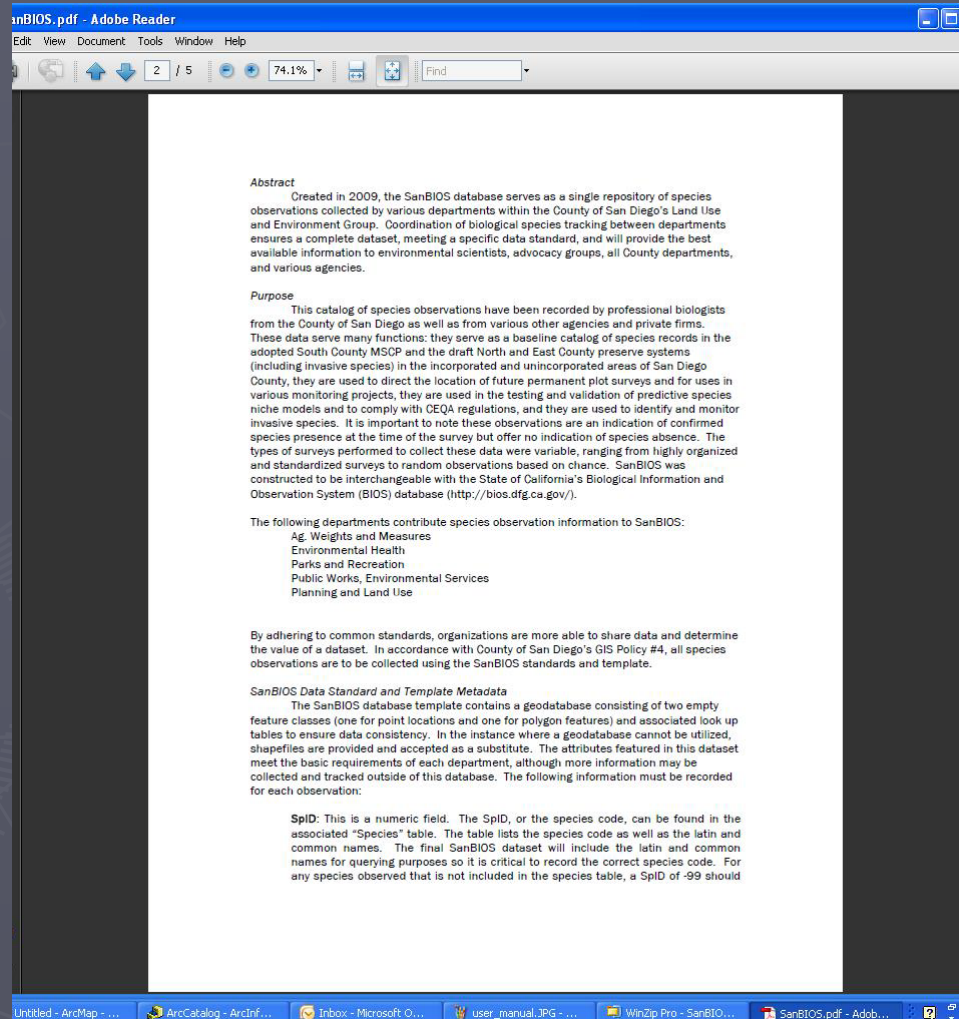
Description	Extent	Metadata	Download	Size
Canyons	City	●	●	177.32 KB
Draft North County MSCP plan.	County	●	●	1.73 MB
Ecologic Subregions	County	●	●	100.85 KB
Isoplethials with a 1-inch contour interval derived from the 300-foot rainfall raster dataset.	County	●	●	2.53 MB
Environmentally Sensitive Areas	County	●	●	1.59 MB
Forest Conservation Initiative for San Diego County.	County	●	●	1.35 MB
Habitat Evaluation Model	County	●	●	10.38 MB
Multiple Habitat Planning Areas (MHPA)	City	●	●	506.06 KB
Multiple Species Conservation Program (MSCP) Areas	County	●	●	868.99 KB
Draft East County MSCP plan.	County	●	●	26.62 MB
Habitat conservation and loss due to development within the San Diego MSCP.	County	●	●	4.56 MB
SanBIOS - single repository of species observations collected by various departments within the County of San Diego's Land Use and Environment Group. Zip file contains 2 zip files - 1 is data & 1 templates for collecting SanBIOS data.	County	●	●	7.19 MB
Vegetation communities in the San Diego region.	County	●	●	61.10 MB
Water Quality Sensitive Areas	City	●	●	6.19 MB

Internet 100%

start

Untitled - ArcMap - ... ArcCatalog - ArcInf... Inbox - Microsoft O... untitled - Paint SanGIS - Windows I... WinZip Pro - SanBIO... 2:41 PM

Read the Instructions



Examine the data's structure

The screenshot displays the ArcMap interface with a map of the Ramona Grasslands Preserve. The map shows various land use categories, including green areas for the preserve and white areas for roads and parcels. A red circle highlights a specific point feature on the map, and an arrow points from this circle to the Identify window.

The Identify window is open, showing the details for the selected feature. The window title is "Identify" and it displays the following information:

Identify from: <Top-most layer>

SANGIS.ECO_SANBIOS_P
Ramona Grasslands Pre

Location: 6,350,850.520 1,957,136.258 Feet

Field	Value
OBJECTID	20460
NOTES	No Data
SPID	267
OBSERVER	RECON
VOUCHERID	-99
SITENAME	Ramona Grasslands Preserve
POINT_X	6350862.068821
POINT_Y	1957128.272735
OBSDATE	6/14/2005
COUNTOFIND	1
PROTOCOLNA	No Data
PROTOCOLDE	No Data
SITENOTES	No Data
DBEDITDATE	3/18/2009
SRCDOCNAME	Biological Survey Report for the Ra...
DBSTEWARD	Casey, Melanie
DEPTNAME	Parks and Recreation
LIFEFORM	Animal - Amphibian
ORIGINDESC	Digital data from outside source
PNAME	Within a 160 m diameter
SITEQUALDE	Unknown
SOURCE_NAM	Field notes
MASTER_LAT	Bufo californicus
MASTER_COM	Arroyo toad
STATUS	Sensitive
Shape	Point

Identified 1 Feature

Practice using empty dataset

The screenshot displays the ArcMap interface with several attribute tables open, each representing a different dataset. The main map area is empty, showing a coordinate system of -43841051.494 60296424.756 Feet. The taskbar at the bottom shows the Windows Start menu and several open applications, including Microsoft Outlook and ArcMap.

Attributes of Precision

OBJECTID *	PCode *	PName
1	1	Within a 160 m diameter
2	2	Within a 500 m diameter
3	3	Within a 1 km diameter
4	4	Within a 2 km diameter
5	5	Within a 4 km diameter
6	6	Within a 8 km diameter

Attributes of Species

OBJECTID *	master_lat	master_com
1	Brassica tournefortii	Saharan mustard
2	Carpobrotus edulis	Iceplant
3	Centaurea maculosa	Spotted knapweed
4	Centaurea solstitialis	Yellow starthistle
5	Chrysanthemum coronarium	Crown daisy
6	Cortaderia jubata	Jubatagrass
7	Cortaderia selloana	Pampasgrass
8	Cytisus scoparius	Scotch broom
9	Ehrharta calycina	Purple veldtgrass
10	Eucalyptus globulus	Tasmanian blue gum
11	Foeniculum vulgare	Fennel
12	Genista monspessulana	French broom
13	Lepidium latifolium	Perennial pepperweed
14	Leucanthemum vulgare	Ox eye daisy
15	Mycoporum laetum	Lollipop tree
17	Phoenix canariensis	Canary Island date palm
18	Rubus armeniacus	Himalaya blackberry
19	Spartium junceum	Spanish broom
20	Thlaspi arvense	Medusahead
21	Thlaspi ramosissimum	Tamarisk
22	Thlaspi robustum	Mexican fan palm
23	Thlaspi chlorurus	Green tailed towhee
24	Thlaspi cyanellus	Green sunfish
25	Thlaspi villosus	Hairy woodpecker
26	Thlaspi hammitii	Hammit's claycress
27	Thlaspi uncinatus	Harris' hawk
28	Thlaspi querula	Harris' sparrow
29	Thlaspi andrei	Harvester ant
30	Thlaspi stoddardii	
31	Thlaspi guttatus	
32	Thlaspi sparsiflora	
33	Thlaspi cinereum	

Attributes of SiteQuality

OBJECTID *	SiteQualid *	SiteQualDe
1	1	Excellent
2	2	Good
3	3	Fair
4	4	Poor
5	98	Not Applicable
6	99	Unknown

Attributes of Source

OBJECTID_1 *	source_nam	SourceID *
1	Published information	1
2	Voucher specimen	2
3	Gray literature	3
4	Anecdotal accounts	4
5	Field notes	5

Attributes of Origin

OBJECTID_1 *	Originid *	OriginDesc
1	1	GPS
2	2	Digital data from outside source
3	3	Non-GPS coordinate
4	4	Map
5	5	Description

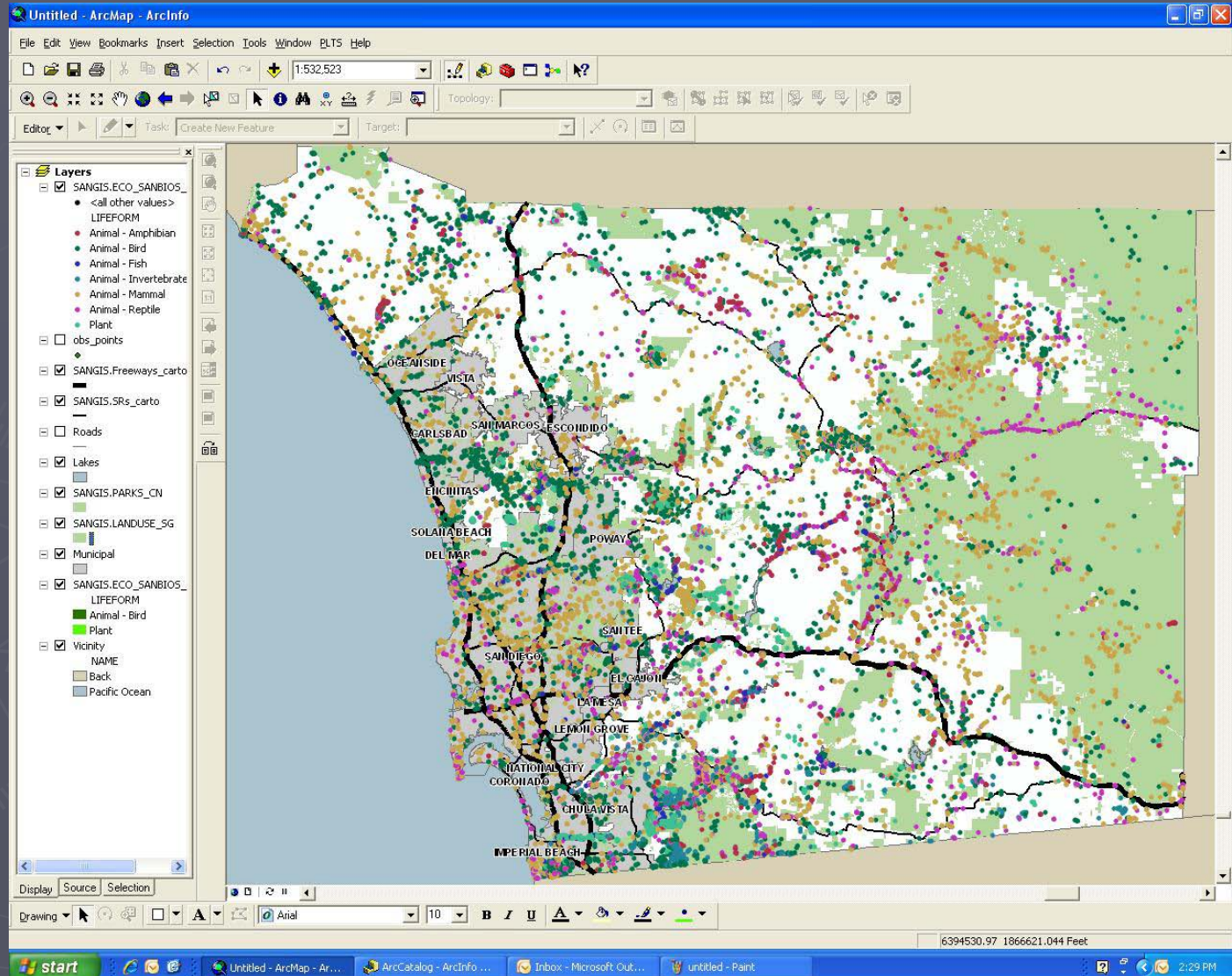
Attributes of LifeForm

OBJECTID *	LifeID *	LifeForm
1	1	Animal - Amphibian
2	2	Animal - Bird
3	3	Animal - Fish
4	4	Animal - Invertebrate
5	5	Animal - Reptile
6	6	Animal - Mammal
7	7	Plant

Attributes of Departments

OBJECTID_1 *	DeptID *	DeptName
1	1	Ag Weights and Measures
2	2	Environmental Health
3	3	Parks and Recreation
4	4	Planning and Land Use
5	5	Public Works

Use the full dataset for your research



Answer questions with the metadata

The screenshot displays the ArcCatalog application window. The title bar reads 'ArcCatalog - ArcInfo - E:\Data\SanBIOS\SanBiosTemplate\template_v1\SANBIOS.gdb\observations\obs_points'. The menu bar includes File, Edit, View, Go, Tools, Window, and PLTS. The toolbar contains various icons for file operations and navigation. The 'Location' field shows the path 'E:\Data\SanBIOS\SanBiosTemplate\template_v1\SANBIOS.gdb\observations\obs_p...'. The 'Stylesheet' dropdown is set to 'FGDC ESRI'. The left pane shows a tree view of the project structure, with 'SANBIOS.gdb' expanded to show 'observations' and 'obs_points'. The right pane displays the metadata for 'Species Observation Points', which is a 'File Geodatabase Feature Class'. The metadata is organized into tabs: Description, Spatial, and Attributes. The 'Description' tab is active, showing 'Keywords', 'Theme', 'Place', 'Description', 'Abstract', 'Purpose', 'Status of the data', 'Time period for which the data is relevant', and 'Publication Information'.

Species Observation Points
File Geodatabase Feature Class

Description | **Spatial** | **Attributes**

Keywords
Theme: MSCP, Management, Inventory, Naturalism, CEQA, Flora, Fauna, Sensitive Species, Baseline Surveys, Monitoring
Place: San Diego

Description
Abstract
SANBIOS VERSION 1: THIS DATASET IS UPDATED FREQUENTLY. DOWNLOAD CURRENT VERSION AT SANGIS.ORG. Created in 2009, the SanBIOS database serves as a single repository of species observations collected by various departments within the County of San Diego's Land Use and Environment Group. Coordination of biological species tracking between departments ensures a complete dataset, meeting a specific data standard, and will provide the best available information to environmental scientists, advocacy groups, all County departments, and various agencies.

Purpose
This catalog of species observations have been recorded by professional biologists from the County of San Diego as well as from various other agencies and firms. These data serve many functions: they serve as a baseline catalog of species records in the MSCP preserve systems (including invasive species) in the incorporated areas of San Diego County, they are used to direct the location of future permanent plot surveys and for uses in various monitoring projects, they are used in the testing and validation of predictive species niche models and to comply with CEQA regulations, and they are used to identify and monitor invasive species. It is important to note these observations are an indication of confirmed species presence at the time of the survey but offer no indication of species absence. The types of surveys performed to collect these data were variable, ranging from highly organized and standardized surveys to random observations based on change. SanBIOS was constructed to be interchangeable with the State of California's Biological Information and Observation System (BIOS) database (<http://bios.dfg.ca.gov/>).

Status of the data
In work
Data update frequency: Continually

Time period for which the data is relevant

Publication Information
Who created the data: County of San Diego - Land Use and Environment Group
Date and time: 2009

Thanks

For Questions Contact:

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